

**TRANSGENIC ANIMALS AS URINARY BIOREACTORS FOR THE PRODUCTION
OF POLYPEPTIDE IN THE URINE, RECOMBINANT DNA CONSTRUCT FOR
KIDNEY-SPECIFIC EXPRESSION, AND METHOD OF USING SAME**

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CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a continuation-in-part of
application 09/438,785, filed November 12, 1999, ^{now abandoned,} which claims
priority under 35 U.S.C. §119(e) from U.S. provisional
application 60/108,195, filed November 13, 1998, and U.S.
provisional application 60/142,925, filed July 9, 1999, the
entire contents of each of these prior applications are hereby
incorporated by reference.

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to transgenic animals
as urinary bioreactors for the expression and production of
polypeptides in the urine. The present invention further
relates to a recombinant DNA construct for kidney-specific
expression of polypeptides in the urine and to a method for
producing such polypeptides in the urine.

Description of the Related Art

Significant progress has recently been made in using
transgenic animals as bioreactors to produce large quantity
and high quality pharmaceuticals. The overall strategy
entails the use of tissue-specific promoters to drive the
expression of genes encoding medically important molecules.
When those molecules are expressed in the target tissue of